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EXAMINER	
DEAK, LESLIE R	

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN J. O'MAHONY, MARK GELFAND,
and EDWARD G. RYCHLICK

Appeal 2007-0696
Application 10/601,574
Technology Center 3700

Decided: January 16, 2008

Before: TERRY J. OWENS, MURRIEL E. CRAWFORD, and JENNIFER D. BAHR, *Administrative Patent Judges*.

CRAWFORD, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF CASE

Appellants appeal under 35 U.S.C. § 134 (2002) from a final rejection of claims 82-85. Claims 1-36, 40, 44, 58-60 and 73 have been cancelled and claims 37-39, 41-43, 45-57, 61-72 and 74-81 have been withdrawn from consideration. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

Appellants invented a method and apparatus for blood withdrawal and infusion using a pressure controller (Specification 1).

Claims 82 and 84 under appeal read as follows:

> 82. A leak detector for a sterile contiguous fluid line for infusing a patient, the fluid line including a draw line connectable to at least one patient access and a return line connectable to said at least one patient access, said detector comprising:
>
> a portion of the fluid line adapted to be interoperable with a pump actuator such that fluid may be conveyed therethrough;
>
> a filter, or filter connectors to permit connection to a filter, to complete a closed fluid circuit joining said draw and return lines;
>
> said pump actuator having a first configuration in which a positive pressure is generated in said return line and a second configuration in which a negative pressure in said return line, whereby a flow through said return line may be reversed when the pump actuator switches from the first configuration to the second configuration, and
>
> a blood leak sensor coupled to said fluid line.
>
> 84. A blood flow direction control device for a sterile contiguous fluid line for infusing a patient, the fluid line including a draw line connectable to at least one patient access and a return line connectable to said at least one patient access, said device comprising:
>
> a portion of the fluid line adapted to be interoperable with a pump actuator such that fluid may be conveyed therethrough;
>
> a filter, or filter connectors to permit connection to a filter, to complete a closed fluid circuit joining said draw and return lines;
>
> at least a wetted portion of the portion of the fluid line and the pump actuator having a reverse flow operational mode in which the actuator generates a negative pressure in said fluid line, and a flow through said return line is reversed.

The Examiner rejected claims 82-85 under 35 U.S.C. § 102(b) as being anticipated by Kenley.[1]

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Kenley	US 5,690,831	Nov. 25, 1997

Appellants contend that Kenley does not disclose a return line connectable to at least one patient access.

ISSUE

Whether the Examiner erred in finding that Kenley discloses a return line, connectable to at least one patient access, and in which a negative pressure is generated by a pump actuator. This issue turns on whether Kenley's line 450 is a return line which is "connectable" to at least one patient access.

FINDINGS OF FACT

Kenley discloses and depicts in Figure 13, a blood flow direction control device having a blood pump 458 which pumps blood drawn from a patient to a dialyzer 404 then back to the patient. The device includes a draw line 432 connectable to at least one patient access. After being withdrawn from the patient, the blood flows through the dialyzer 404. After leaving the dialyzer 404, the "blood is returned to the patient via line 470" (Kenley, col. 26, l. 35). Before reaching the patient, the blood is sent through an air-separating and pressure monitoring chamber 472 (Kenley,

[1] The Examiner has withdrawn the rejection of claims 82-85 under 35 U.S.C. § 103 (Answer, 3).

col. 26, ll. 36-38). The level of the blood in the pressure monitoring chamber 472 can be changed by operating the blood pump 458 in reverse (Kenley, col. 26, ll. 57-58; col. 50, ll. 7-10). This operation of the blood pump in the reverse direction generates a negative pressure in return line 450. The return line 470 is connected through pressure monitoring chamber 472 to the patient access. Return line 470 is capable of being connected directly to the patient access.

ANALYSIS

We will sustain the Examiner's rejection because line 470 is a return line connectable to a patient access as broadly recited in independent claims 82 and 84. We are not persuaded by Appellants' argument that line 470 is not a return line because it does not directly connect to a patient access. Firstly, the blood in line 470 is returning from the dialyzer 404 to the patient and thus is a return line as broadly claimed. We note that Kenley discloses that blood is returned to the patient via line 470 (Kenley, col. 26, l. 35). In addition, although line 470 does not directly connect to a patient access, it is nonetheless connected to the patient access through chamber 471 and line 492. We note that claims 82 and 84 do not recite that the return line is *directly* connected to the patient access. Line 470 returns blood to a patient and is connected, although not directly, to a patient access. In addition, as claims 82 and 83 recite that the return line is *connectable* to a patient access, the claims do not even require that the return line is connected to the patient access only that the return line is capable of being connected to the patient access. Line 470 of Kenley is certainly capable of being connected to a patient access. We are also not persuaded by Appellants' argument that

reversing the blood pump 458 does not create a negative pressure in the return line 470 and reverse blood flow in the line (App. Br. 11). In order to reduce the level of blood in chamber 474 by reversing the blood pump 458, as disclosed by Kenley, blood must be drawn from chamber 474 through return line 470 by creation of a negative pressure.

In view of the foregoing, we will sustain the Examiner's rejection of claims 82 and 84. We will also sustain the rejection as it is directed to claims 83 and 85 because the Appellants have not argued the separate patentability of these claims.

The decision of the Examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED

hh

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